

Advanced Algebra

Name _____

Date _____

Refer to p. 5 for problems 1-5.

1a) Define Rational Numbers.

b) Some examples of rational numbers are _____

2a) Define Irrational Numbers.

b) Some examples of irrational numbers are _____

3. The set of counting numbers is { _____ }

4. The set of whole numbers is { _____ }

5. The set of integers is { _____ }

6. Simplify. (Example: $\sqrt{100} = 10$ because $10^2 = 100$.)

a. $\sqrt{16}$

b. $\sqrt{25}$

c. $\sqrt{81}$

d. $\sqrt{64}$

7. 16, 25, 64, and 81 are called perfect squares. Write the first 10 perfect squares.

_____, _____, _____, 16, _____, _____, _____, _____, 81, _____

8. Write each number as the product of a perfect square and another number. Use the largest perfect square.

a. $12 =$

b. $20 =$

c. $90 =$

d. $27 =$

e. $54 =$

f. $36 =$